

# 1. Introduction

---

A multitude of public and private organizations engage in international standard-setting processes. Some organizations establish technical standards to coordinate business or government behavior for a number of issue areas like the distribution of radio frequencies, international aviation, maritime classification and transportation, global communication systems, financial reporting and accounting, the size and shape of nuts and bolts and the like. Other organizations set standards for international games and sports, governing everything from international football events to the organization of local chess clubs around the world. Some organizations develop standards for voluntary information disclosure: two examples are the Global Reporting Initiative, a leading global standard in the field of nonfinancial reporting; and the Extractive Industries Transparency Initiative, a public-private initiative created to increase the transparency of payments made by companies in the extractive industries to host governments. Other organizations, like the chemical industry's Responsible Care, develop industry-wide codes of conduct to promote specific principles, norms and guidelines for environmentally responsible conduct. It is evident, then, that standard setting is neither a new activity nor a phenomenon limited to specific industries or sectors (Brunsson and Jacobsson 2000).

Over the past two decades, however, non-state actors have created a new type of institution for transnational environmental governance – in the shape of market-based certification programs. Various non-state certification schemes have emerged in response to perceived public policy failures, and have become particularly vibrant sources of rulemaking and governance. Sometimes referred to as the 'privatization of governance', non-state certification schemes have been launched in many sectors, ranging from forest and fisheries to eco-tourism and fair-trade initiatives (for example Cashore 2002; Honey 2002; Phillips et al. 2003; Conroy 2007; Raynolds et al. 2007). These programs typically establish environmental performance standards, as well as labor standards and other standards for socially responsible production. They go beyond voluntary codes of conduct and self-regulatory modes of governing, by involving the development of prescriptive standards, which require behavioral changes and independent verification of

compliance (Cashore 2002). They also constitute governing arenas in which a wide range of stakeholders interact and agree upon rules and governance mechanisms (Bernstein and Cashore 2007). Producers participate in these certification schemes on a voluntary basis; as they are created and governed by non-state actors, there is no use of legal coercion to make producers sign onto the schemes. Rather, activists and advocacy coalitions use a range of strategies to convince, pressure or force producers to participate.

This book focuses on certification schemes in the forest and fisheries sectors, as initiatives in these sectors are among the most advanced cases of non-state rulemaking and governance. The Forest Stewardship Council (FSC) has served as a model for other certification schemes and arguably represents the most successful and well-known certification program to date. Although certification schemes were first developed through forestry initiatives, fisheries shared similar concerns: resource depletion, environmental degradation and insufficient governmental action. The Marine Stewardship Council (MSC) was formed by the World Wide Fund for Nature (WWF) and the multinational corporation, Unilever, which sought to model a fisheries sustainability program after the FSC. The certification model has spread to many other sectors as well, including sustainable tourism, park management, palm oil production, soy production and the marine aquarium trade. An examination of forest and fisheries certification can help us to understand the emergence and evolution of market-based governance programs and their effectiveness in addressing the problems or public policy failures that motivated their establishment.

This chapter proceeds as follows. The first section outlines the key research themes and research questions in the book. The second section provides a brief introduction to the literature on transnational environmental governance and non-state governance programs. The third section examines the features that render these programs different from other types of governance initiatives in the transnational realm. The chapter closes with an overview of the plan for the book.

## RESEARCH THEMES AND RESEARCH QUESTIONS

The overall purpose of this book is to contribute to the understanding of an under-explored area of contemporary environmental politics: the emergence and effectiveness of non-state governance institutions in the shape of voluntary certification programs. The overarching research questions in this book are fundamental to political science. How can we explain institutional formation? How do institutions influence behavior?

Although we know a great deal about the formation and effectiveness

of international regimes established by states, we still have limited knowledge about the emergence and effectiveness of transnational governance schemes developed by non-state actors such as non-governmental organizations (NGOs) and industry associations. This book focuses on three themes – the emergence, organization and effectiveness of non-state certification schemes – by examining three broad research questions:

- How can we explain the emergence of non-state certification programs in the forest and fisheries sectors?
- How do certain program designs emerge, and how and to what extent does program design influence standard-setting outcomes?
- What is the effectiveness of certification programs in resolving or ameliorating the problems that motivated their establishment?

### **Emergence**

The origins of non-state certification in the forest and fisheries sectors serve as the first theme in this book. Forest and fisheries certification programs have become innovative venues for non-state rulemaking and governance. But why did certification programs emerge in these sectors; how did they evolve; and how have environmental NGOs, producers, consumers and states influenced non-state certification initiatives? More broadly, an examination of forest and fisheries certification can help us to understand the question of why non-state governance institutions increasingly supplement or supplant state-based, territorial government. This book explores the processes and mechanisms of the emergence and proliferation of non-state governance schemes. Although scholars have begun to identify the conditions that helped to establish certification programs in either the forest sector (Cashore et al. 2004; Bartley 2007; Pattberg 2007) or the fisheries sector (Auld 2007; Gulbrandsen 2009), there are few comparative studies of the emergence of certification in these two sectors. A comparative study of forest and fisheries certification and an analytical focus on processes and mechanisms can enrich the literature on non-state governance and private institutions. It can also enrich the literature on international environmental regimes, which lacks an empirical grounding in specific cases of non-state governance.

### **Organization**

The second theme in this book is the organizational design of non-state certification programs. As discussed in this chapter, existing programs possess both commonalities and significant differences. Specifically, there are a

number of ways to organize rulemaking processes, standard-setting activities and certification procedures. Three basic questions are addressed. How did certain program designs emerge? Did one particular design eventually emerge as the dominant and appropriate certification model? How and to what extent did program design influence standard-setting outcomes?

Non-state certification programs constitute governing *arenas* that assemble various stakeholders, regulate their interactions and provide opportunities for learning and for the mutual adaptation of behavior (Bernstein and Cashore 2007). In referring to an institution as a governing arena, we are interested in the access of actors to decision-making processes, their decision-making rights and their influence on decision-making outcomes. Governing arenas must have such mechanisms as decision rules and procedures for aggregating preferences into collective decisions. Standard setters must also decide which type of actors that should be allowed to participate in rulemaking, and what role they should play in the governance process.

In analyzing certification programs as governance arenas, this book examines how *constitutive* rules regulating the access, participation and decision-making rights of stakeholders influence the unfolding of the standard-setting process and the outcome of that process. Constitutive rules can be expected to influence standard-setting processes and the *regulative* rules being produced – the standards that regulate the behavior of certified producers (cf. Pattberg 2007, pp. 53–4). Industry domination in standard-setting bodies can be expected to result in industry-friendly standards, for example, whereas NGO domination can be expected to result in stricter social and environmental standards. In focus here is also the way in which non-state actors organize rulemaking and governance to create legitimacy for their actions and to enhance accountability. The creation of non-state certification programs can be seen as an effort by civil society organizations or industry associations to institutionalize accountability mechanisms beyond the nation state (Gulbrandsen 2008). Instead of simply replicating the traditional, territorial accountability structures in democratic states, these programs could create new tools and mechanisms that may prove more effective in holding producers to account than could traditional government regulations. The organizational focus of this book enables a detailed analysis of the emergence of certain program designs and their influence on standard-setting processes and outcomes.

### **Effectiveness**

The third theme in this book is the effectiveness or performance of non-state certification schemes. The central question surrounding this issue

is: How do we determine the effectiveness of certification programs as institutions of social and environmental governance? In order to answer this question, we need to clarify exactly what is meant by 'institutional effectiveness'. Following the most common definition of regime effectiveness, institutions of environmental governance can be considered effective if they contribute to the alleviation or resolution of the specific problems they address (for example Underdal 1992, 2002; Young and Levy 1999). Fisheries certification, for instance, was introduced to address grave problems in the fisheries sector – including overfishing caused by the overcapacity of fishing fleets and habitat destruction caused by wasteful fishing practices and vessel pollution. Forest certification was introduced to counter environmental degradation in forestry, caused by such practices as logging of old-growth forests, use of harmful pesticides and herbicides, clear-cutting of large areas, and drainage and ditching of forest wetlands. In this context, the effectiveness of a certification scheme could be operationalized as the degree to which the certification scheme modifies fisheries and forestry practices in ways that can resolve or alleviate these problems.

A distinction should be made between the direct effects of an institution and the broader consequences flowing from institutional-formation efforts (Underdal 2002, p. 5). As for the direct institutional effects, determining if the problem at hand can be solved under present certification schemes requires us to identify the causal mechanisms that mediate between certification schemes and changes in problem-relevant behavior, as well as the variables that influence problem-solving effectiveness. Specifying theoretically based and empirically grounded causal mechanisms is important for understanding the relationship between institutions and changes in problem-relevant behavior (Elster 1989; Young and Levy 1999). Detailed process tracing and case-study analysis of certification schemes can uncover when and under what conditions these mechanisms influence the behavior of certified producers.

In assessing broader consequences, I look beyond the certification instrument itself to discuss (1) unintended consequences of forest and fisheries certification, (2) sites of diffusion for the certification model, and (3) institutional interaction between certification programs and governmental and intergovernmental regulations. The first area for investigation is consequences not necessarily intended or anticipated by those who created forest and fisheries programs – consequences such as favoring large-scale over small-scale operations because of the benefits of economies of scale. The second area is the spread of the certification model across sectors and industries, from forests and fisheries to eco-tourism and fair-trade initiatives. Third is the interplay between public and private institutions

governing natural resource use and protection. Because certification initiatives exist alongside existing international institutions and national laws and regulations, it is necessary to discuss interaction effects between public and private rulemaking and governance. Private and public institutions can reinforce each other's rules and enforcement capacities (positive interplay), but they may also disrupt or impede each other's effectiveness (negative interplay). In this context, it is interesting to examine certification initiatives to see if they tend to supplement or supplant traditional public policy regulations.

## TRANSNATIONAL ENVIRONMENTAL GOVERNANCE

Traditional state-driven top-down governance approaches are being increasingly complemented by shared public and private authority, cooperative partnerships, voluntary standards, codes of conduct, and business self-regulation, prompting widespread claims that we are witnessing a shift from *government* to *governance* (Rosenau 1995, 2000; Rhodes 1996, 1997; Mol et al. 2000; Pierre 2000). In recent years, a literature on global governance and multi-level governance has emerged in opposition to the state-centric ontology of traditional international relations theorizing. Global governance approaches are used to capture and understand the myriad networks and steering arrangements in world affairs in the absence of an overarching authority at the international level (for example Rosenau 1997, 2003). Being depicted as an alternative to state-centered intergovernmentalist approaches, the concept of multi-level governance has been applied primarily to studies of European Union policy making and politics (for example Hooghe and Marks 2001). It also has relevance, however, for the study of non-state governance, in that it directs attention to the multiplicity of actors and networks engaged in policy making and enactment at different levels of authority and in various sectors (Bache and Flinders 2004).

Multi-level and global-governance scholars have in common their assertion that, as a result of globalization, centralization and supranational integration on the one hand, and localization, regionalization and fragmentation on the other, states must increasingly share rulemaking authority with subnational, transnational and supranational actors. They point to the alleged failure of international relations theory to capture adequately the effects of globalization and the increasing salience and impact of such non-state actors as environmental NGOs, social movement organizations and multinational corporations. Studies of global governance typically

focus on nonhierarchical, network-based modes of governing, in which a range of actors are involved. Consequently, we should look beyond inter-governmental regimes to identify the central governance arenas and the key actors in a transnationalizing world.

A growing literature has explored the influence of transnational advocacy coalitions around the world. The most profound change between the earlier period of corporate criticism and the present climate is arguably the explosion of transnational activist and NGO networks (Hauffer 2001). Whereas activism in the past was limited to the domestic arena, activists today organize across national boundaries, convening stakeholders in a number of countries to pressure companies or governments (for example Risse-Kappen 1995; Wapner 1996; Keck and Sikkink 1998; McAdam et al. 2001). Activists and NGOs have traditionally targeted governments to force them to make companies accountable by enacting laws and regulations. In the era of globalization, transnational activist networks are using increasingly sophisticated methods to hold companies accountable. They seek to mobilize consumer sentiment through calls for boycotts, and they seek to mobilize investors through socially responsible investment funds and appeals to shareholders (Hauffer 2001). They make effective use of the Internet, and orchestrate coordinated media campaigns across the globe to force companies to reform policies (cf. Spar 1998).

According to the notion of 'political consumerism' (Micheletti 2003; Micheletti et al. 2004), ethically and politically motivated consumers may force policy reform or persuade producers to abandon questionable practices through their choice of producers and products. Besides making political and ethical purchases, citizens can boycott particular brands and products from companies with economic, social or environmental practices that fall from public favor. Social movement organizations facilitate political consumerism by praising or damning industry practices, mobilizing consumers and advising companies on tapping into potential consumer demand. In short, the global marketplace is not only a place for economic transactions but also a site of political agitation by social movement organizations, interest groups and consumers.

The rise of transnational regulation and non-state governance institutions in world politics is a topic of great interest to an increasingly large number of scholars across many disciplines. Scholars have begun to explain the conditions that helped to establish non-state institutions in world politics. In a much-cited volume on the increasing salience of 'private authorities' in international affairs, Cutler et al. (1999, p. 16) note that the literature on international regimes has generally underestimated the role of non-state actors, maintaining that these actors are 'increasingly engaged in authoritative decision-making that was previously the

prerogative of sovereign states'. Their edited volume includes case studies of standards for such issues as online commerce, telecommunication and information technologies, maritime transport, intellectual property rights, business self-regulation and the governance of international mineral markets. Cutler et al. convincingly argue that transnational private-sector governance schemes increasingly supplement governance arrangements involving states, but they do not assess the effectiveness of such schemes. Moreover, by focusing only on cases in which business creates the rules, they exclude cases in which non business interests hold or compete for rulemaking authority (Cashore 2002).

The expansion of private authority in international affairs is further explored in a volume edited by Hall and Biersteker (2002), which includes cases on the role of private sector markets (market authority), civil society and transnational regulation (moral authority) and transnational organized crime (illicit authority). One chapter by Lipschutz and Fogel (2002) examines the emergence of transnational environmental regulation. They remain skeptical of the capacity of civil society regulations to provide quick fixes to problems of ineffective transboundary environmental governance and lack of democratic accountability in a transnationalizing world. Similarly, in a study of self-regulation in industry, Hauffer (2001) concludes that such regulations are unlikely to fill the policy void if public regulation of social and environmental problems is weak or absent. She attributes the spread of private standards for environmental regulation, worker rights and data privacy to public pressures from activist campaigns and the threat of public policy regulations. Yet, like Lipschutz and Fogel (2002), Hauffer does not assess variation in the effectiveness of business and civil society regulations (cf. Vogel 2008, p. 263).

In recent years, political science and sociology scholars have examined the emergence of forest certification programs (Bartley 2003, 2007; Cashore et al. 2004; Elliott 1999; Gulbrandsen 2004; Klooster 2005; McNichol 2002; Overdevest 2004, 2005; Pattberg 2007). Cashore et al. (2004) have conducted the most comprehensive and academically rigorous social science study on the emergence of forest certification. They explained the variation in support for FSC among forest owners and forest companies in British Columbia, Canada; the USA; the UK; Germany; and Sweden. Their analysis offers a number of valuable insights upon which the analytical framework in this book draws, but they did not investigate the impact of forest certification. Nor did they examine certification initiatives in sectors other than forestry.

This book contributes to the literature on certification programs and the emergence of private authority. It also expands on the evolving political and sociological scholarship regarding green consumerism (Boström and Klintman 2008; Micheletti 2003; Micheletti et al. 2004; Oosterveer 2005)

and the legitimacy and accountability of non-state certification programs (Bernstein and Cashore 2007; Boström 2006a, 2006b; Cashore 2002; Dingwerth 2007; Gulbrandsen 2008). And finally, the book contributes to the emerging literature on the problem-solving effectiveness of forest and fisheries certification programs (Auld et al. 2008; Cashore et al. 2007; Gulbrandsen 2009; Ward 2008).

Non-state governance institutions are generally seen as emerging in response to globalization processes and transboundary problems that states have been unable or unwilling to resolve themselves (for example Djelic and Sahlin-Andersson 2006; Pattberg 2007). Indeed, many of these institutions have been created with little or no involvement of states or traditional international organizations like the UN or the World Bank. In the apparel products field, for example, NGOs created labor standard certification schemes to address sweatshop labor practices, child labor and other human rights violations (Bartley 2005). For other issues, such as trading in coffee, bananas and a wide range of other commodities, NGOs have taken the initiative to create fair-trade labelling schemes to guarantee marginalized producers in developing countries a fair minimum price for their products and to improve their working conditions (Raynolds et al. 2007). Realizing that traditional boycott campaigns often failed to encourage companies to opt for more sustainable production practices, the creation of non-state certification schemes was, in many cases, an NGO effort to find new ways to influence corporate conduct.

This shift from transnational activism and boycotts to transnational rules and governance programs is precisely the focus of this book. Although the activities of companies have resulted in a wide range of social and environmental problems, such as child labor, ozone depletion, climate change, deforestation and overfishing, companies are increasingly seen as part of the solution to these problems. In the new climate of voluntary policy making, NGOs assume new roles through strategic engagement with companies and industry associations. It means that a broad range of actors engage in rulemaking processes – often in governance arenas located outside traditional channels of political influence. The next section examines the characteristics of the governance tool in focus in this book: non-state certification schemes.

## APPRAISING NON-STATE CERTIFICATION SCHEMES

The purpose of delineating the features of non-state certification schemes is to understand better their uniqueness as a new form of social and

environmental governance. According to Cutler et al. (1999, p. 19), three features of 'private authority' render their rulemaking authority distinct: first, those subject to the rules being made by private actors must accept the rules as legitimate. Second, there must be a high degree of compliance with rules and decisions being made by private actors. Third, private-sector actors must be empowered either explicitly or implicitly by governments and international organizations granting them the right to make decisions for others.

This latter assumption has been questioned by Cashore (2002), who argues that it is precisely the lack of government delegation of rulemaking authority that is one of the defining features of market-based certification programs, or what he calls 'non-state market-driven' governance. Although states may influence non-state governance systems, they do not use their sovereign authority to require compliance with rules. Governments can act as traditional interest groups attempting to influence rulemaking in non-state governance systems; they can act like any large market player by initiating procurement policies; and they can sometimes act like producers seeking certification of government-controlled operations. But non-state market-driven governance systems do not derive rulemaking authority from states. Of course, governments can and sometimes do use their sovereign authority to require adherence to standards developed by non-state actors. In this event, however, the logic of market-driven support no longer explains why producers adopt and comply with the standards, and it is, therefore, no longer a case of non-state market-driven governance (Cashore 2002, p. 510).

According to Cashore, the logic of market-driven support means that authority granted to non-state market-driven governance schemes emanates from the market's supply chain. Producers and consumers along the supply chain make their own evaluations about whether or not to grant authority to these schemes. The market's supply chain provides the incentives through which evaluations of support occurs. Compliance incentives in the form of a promise of price premiums, market access or prevention of boycott campaigns are created up and down the commodity supply chain. In this way, non-state market-driven governance systems aim to ameliorate social and environmental problems through the *reconfiguration* of markets (Bernstein and Cashore 2007, p. 350). Unlike business coordination standards, these governance systems seek to create incentives for producers to address problems that they would otherwise have little incentive to address. This characteristic of non-state market-driven governance systems distinguishes them from most other types of private and public-private governance arrangements (Cashore 2002, pp. 511–13).

Other scholars have questioned this conceptualization of certification

as a non-state market-driven mode of governance, highlighting the problematic nature of the public-private distinction (Boström 2003; Meidinger 2006; Tollefson et al. 2008) Yet, the dominant tendency in the literature has been to characterize certification programs as non-state or private regulation (Bartley 2003, 2005; Cashore et al. 2004; Klooster 2005; Lipschutz and Fogel 2002; Pattberg 2007; Vogel 2005, 2008). While acknowledging the difficulties with characterizing certification programs as 'non-state' and 'market-driven', I find Cashore's definition helpful as a point of departure for distinguishing these programs from other governance experiments.

With the characteristics of non-state certification programs briefly reviewed, it is now useful to describe their specific attributes in greater detail. Social and environmental certification programs generally comprise the following features (cf. Auld 2007, p. 4; Meidinger 2006; Bernstein and Cashore 2007; Cashore 2002):

1. They have standards for regulating the social and/or environmental impact of production processes. Yet, the stringency and scope of these standards vary across programs. Some programs have relatively stringent standards for regulating both the social and environmental impact of production within a sector or industry. Other programs have flexible and discretionary standards for regulating only specific aspects of the production process. The size and type of target groups (producers) for the standards also varies. Some programs seek to approve only the social and environmental frontrunners within an industry, whereas other programs seek industry-wide adoption of standards.
2. They have mechanisms to verify compliance with the standards and create consequences for noncompliance. Verification of compliance usually involves a certification procedure in which auditors assess whether or not producers meet the standards. Producers that pass the inspection of on-the-ground practices are awarded a certificate attesting to compliance. If producers fail to correct serious breaches of the standards, they risk the loss of their certification. The scope of the auditing process and the consequences for failing to comply vary among programs, however. Although most programs involve on-the-ground inspections, the number and types of issues addressed by auditors vary by program. Depending on the seriousness of instances of noncompliance, but also on the rules of the certification program, the consequences for failing to comply range from minor or major requests to correct practices on the one hand, to revocation of the certificate on the other.

3. They have rules for accreditation of third-party certification bodies (certifiers). Accredited certifiers usually conduct on-the-ground inspections and monitoring of producer practices, although certain programs involve only an internal verification process. Initially, accreditation of certifiers was often conducted within certification programs; but over time, it has, in many cases, become outsourced to independent accreditation organizations. These organizations accredit certifiers in accordance with the requirements established by the certification program.
4. They have governance bodies and rules for regulating membership in the program, decision making, standard-setting activities, complaints and dispute resolution. Membership rules and governance structures vary by program; some have membership and voting rules that are favorable to industry and business interests, whereas others have rules that balance decision-making powers among environmental, social and economic interests. There is also significant variation in the rules for standard-setting activities, handling of complaints and dispute resolution.
5. They have tracking requirements for following products originating from approved operations through to the end consumer, as well as logos or labels that can be used on the products. Tracking requirements, type of labels and rules for label use vary by program.

This list of attributes demonstrates that although there are many differences in program design, social and environmental certification programs have several features in common (Auld 2007). Based on these commonalities, we can identify cases of non-state governance that clearly fall outside this new form of governance. This delimitation is important, because scholars of transnational governance systems tend to conflate the new type of certification programs and a wide range of other governance experiments, ignoring the unique and innovative features of the certification programs (Cashore 2002). Certification initiatives in forestry (FSC), fisheries (MSC), the marine aquarium trade (Marine Aquarium Council), coffee production (Fairtrade Labelling Organizations International) and the apparel industry (Fair Labor Association) are examples of full-fledged social and environmental certification programs (Cashore et al. 2004). By contrast, a number of voluntary codes of conduct, sustainability reporting schemes and corporate social responsibility initiatives (see Vogel 2005) *do not qualify* as such programs. The Global Reporting Initiative (GRI), for instance – a leading global standard for non-financial business reporting – does not qualify because it does not involve mandatory verification of compliance with performance-based certification standards. How to use

the GRI guidelines is a decision made within the firm, and reports are not certified by GRI or by accredited certification bodies (Dingwerth 2007, p. 107). Similarly, the UN Global Compact program – a set of ten universal principles in the areas of human rights, labor, the environment and anti-corruption – is not monitored, verified or enforced. Rather, it is dressed in the business-friendly language of dialogue, partnership and voluntarism, and it relies on public transparency rather than policing of the principles (Garsten 2008).

Generic environmental management system standards, such as ISO 14001 and the Eco-management and Audit Scheme of the European Union do not qualify either, because they are hybrid public-private schemes that do not involve verification of on-the-ground compliance with performance-based standards. Instead of prescribing environmental performance objectives, a management-system-based scheme focuses on organizational process design to meet internally established environmental objectives and continually improve performance. It typically requires organizations to establish and implement an environmental policy or plan, review progress through systematic auditing and correct problems (Coglianese and Nash 2002), but the performance level to which they will aim is decided within the organization (Krut and Gleckman 1998; Clapp 1998). These examples should suffice to illustrate that non-state environmental and social certification schemes represent a new form of governance, which differs significantly from the increasing number of voluntary codes of conduct, reporting programs and corporate social responsibility initiatives around the world. Table 1.1 shows some of the most influential non-state certification programs.

## STRUCTURE OF THE BOOK

The next chapter sets out the theoretical and analytical framework of the book. Corresponding to the broad research questions of the study, I outline factors that are likely to influence the emergence of non-state certification schemes, the unfolding and outcome of their standard-setting processes and their effectiveness. I also discuss case selection and methodological considerations in conducting this study.

The two following chapters focus on the emergence, evolution and effectiveness of forest certification around the world. The focus in Chapter 3 is on the formation and evolution of forest certification schemes in Europe, North America and elsewhere. Particular attention is given to the competition between FSC and producer-dominated programs and the way this competition influenced the evolution of forest certification. Chapter

*Table 1.1 Examples of non-state certification programs*

	Origin	Initiators	Policy goal
Forest Stewardship Council	1993	Broad coalition of environmental NGOs and socially concerned companies	Environmentally and socially responsible forestry practices
Rainforest Alliance Certification	1993 <sup>1</sup>	Rainforest Alliance (an NGO)	Sustainable farming through certification of a range of tropical commodities
Sustainable Forestry Initiative	1994 <sup>2</sup>	American Forest and Paper Association	Sustainable forest management
Marine Stewardship Council	1997	World Wide Fund for Nature and Unilever	Environmentally responsible fishing practices
Social Accountability International	1997	Council on Economic Priorities (an NGO)	Protect workers' rights and improve working conditions
Fairtrade Labelling Organizations International	1997 <sup>3</sup>	Broad coalition of NGOs and consumer groups	Guarantee developing country producers fair price, improve working conditions
Marine Aquarium Council	1998	Environmental NGOs, aquarium industry, public aquariums and hobbyist groups	Conserve marine ecosystems through promotion of responsible aquarium trade
Programme for the Endorsement of Forest Certification	1999	European forest owner associations	Sustainable forest management
Fair Labour Association	2001 <sup>4</sup>	Industry, Clinton administration, consumer and labor rights organizations	End sweatshop conditions in factories
Roundtable on Sustainable Palm Oil Certification System	2007 <sup>5</sup>	World Wide Fund for Nature and Unilever	Promote growth and use of sustainable palm oil

Table 1.1 (continued)

	Origin	Initiators	Policy goal
Aquaculture Stewardship Council	2010	World Wide Fund for Nature with participants of the Aquaculture Dialogues	Sustainable fish farming

*Notes:*

1. 1993 was the year the Rainforest Alliance certified the first two tropical farms under its agricultural certification program.
2. Initially an industry code of conduct with mandatory self-reporting for members of the American Forest and Paper Association, the Sustainable Forestry Initiative provided for voluntary third-party verification in 1998.
3. Fairtrade Labelling Organizations International united 15 separate initiatives.
4. 2001 was the year the Fair Labour Association established an independent auditing system.
5. A certification system for sustainable palm oil was launched at the fifth roundtable meeting in 2007.

*Sources:* Bernstein and Cashore (2007) and author's research.

4 reviews and synthesizes what we know about the effectiveness of forest certification. In addition to considering such measures as the forest area certified and the proportion of certified to uncertified forests, I examine patterns of adoption, market penetration and the impacts of on-the-ground auditing.

Comparing FSC and a landowner-dominated competitor, Chapter 5 examines the emergence and effectiveness of forest certification in Sweden and Norway. These countries stand out as particularly suited for comparison; they share many similarities, yet differ in the structure of their forest industries. In this chapter, I examine the ways in which this difference influenced forest certification choices and the subsequent evolution of certification programs.

Like the chapters on forest certification, the two chapters on fisheries certification focus on program origins, design and effectiveness. Chapter 6 examines the way the certification model was exported from the forest sector to the fisheries sector, detailing the origins and evolution of the MSC. Particular attention is paid to the development of the program, and how it was influenced by early choices of program features. Beginning with a review of patterns of adoption, Chapter 7 examines the effectiveness and environmental impact of fisheries certification. In this chapter, I also seek to explain patterns of adoption and discuss criticism of fisheries certification.

Chapter 8 looks beyond the certification instrument to discuss the institutionalization of multi-stakeholder governance programs and sites of diffusion for the certification model. The chapter details the role of environmental NGOs, certifiers and other policy entrepreneurs in spreading the certification model across sectors and industries – among them, the marine aquarium trade, sustainable farming and eco-tourism. This chapter closes with a discussion of the challenges for social and environmental certification programs.

In Chapter 9, I summarize the findings, discuss their relevance for the study of global environmental governance, reflect on some of the wider lessons from this study of forest and fisheries certification, and suggest directions for further research. My primary goal in this book is to provide the reader with a better understanding of the origins and evolution of non-state governance programs and the ability of these programs to address some of the most pressing global environmental problems facing humankind today.